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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/726,261

11/28/2000

D. David Nason

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12/05/2008

DAVIS WRIGHT TREMAINE, LLP/Seattle
1201 Third Avenue, Suite 2200
SEATTLE, WA 98101-3045

EXAMINER

RICHER, AARON M

ART UNIT

PAPER NUMBER

2628

MAIL DATE

DELIVERY MODE

12/05/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/726,261	Applicant(s) NASON ET AL.	
	Examiner AARON M. RICHER	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed September 4, 2008 have been fully considered but they are not persuasive.
2. As to claim 1, applicant argues that Blanset only allows display of data from one OS at a time, but cannot display both MS-DOS and UNIX data at the same time. Examiner notes that there is nothing in claim 1 that actually requires display of multiple sources at once. The Blanset reference appears to prevent unauthorized display by generating a mask that defines the entire display area shown. There is no part of claim 1 that specifies that the mask must be less than the entire display area shown to allow for both sources to display at once.
3. Applicant further argues that the claimed method is not intended to utilize two independent operating systems, rather utilizing resources from the native operating system to write data to the display area. However, it is noted that there is nothing in claim 1 that excludes the use of two operating systems, as long as the secondary operating system utilizes the resources of the native operating system. Examiner notes that the secondary operating system, UNIX, in the Blanset reference uses the display buffer that is owned by the native operating system, MS-DOS, and therefore does use resources from the native operating system.
4. Applicant's arguments with respect to claim 2 have been considered but are moot in view of the new ground(s) of rejection.

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5. As to claim 3, applicant argues that one skilled in the art would understand the filter of claim 3 to be a software component rather than the hardware device that prevents writing of data disclosed by Blanset. However, examiner notes that there is no limitation in claim 3 that limits the invention to software, and so it appears that, since the component in Blanset performs the same task, it would read on the filter.

6. As to claim 8, applicant argues that NN96057 does not provide a routine to associate the generated display region mask with the second application and that Blanset does not remedy this deficiency. However, examiner notes that NN96057 does disclose associating a display region (i.e. the entire display) with a second application (GUI) and this reads on associating a display mask with that application. Examiner recognizes that the NN96057 reference itself does not create a mask. Rather, it is simply told to associate the existing whole display mask with an application. However, mask creation is disclosed by Blanset as previously noted in the rejection to claim 8.

7. Applicant's arguments with respect to the rest of claim 8 have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant's arguments with respect to claim 12 have been considered but are moot in view of the new ground(s) of rejection.

Specification

9. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The term "computer readable medium" in claims 12-17 does not appear in the specification.

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 8-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

12. Claims 8-11 recite a “system” comprising “a GDI”, “a programming interface”, “a display filter”, and a “display output”. These terms do not have hardware support in the specification, and instead appear to be referring to software, which would make the system claimed a program, per se. Examiner notes that a “display output” could possibly be referring to an actual hardware port, but in the context of the claim, could also be a simple software construct. A computer program falls under the category of “functional descriptive material” and does not fall under any of the four categories of patentable subject matter as set forth by 35 USC 101. See MPEP 2106.01, which states:

Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program’s functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program’s functionality to be realized, and is thus statutory.

The invention recited in claims 8-11 is a program, per se, as opposed to a physical computer-readable medium with a program recorded thereon, and is therefore non-statutory.

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13. Claims 12-17 recite a “computer readable medium”. Applicant's specification does not explicitly mention or define such a medium, but does state, on page 8, lines 17-23, that “...software may be delivered over any conventional delivery medium 10, including but not limited to over the air broadcast signals...” This implies that the medium of claims 12-17 can be nothing more than an over-the-air signal, which does not meet the statutory requirements of 35 USC 101.

Regarding a computer program product as a signal, see MPEP 2106 which states:

For example, a claim reciting only a musical composition, literary work, compilation of data, >signal,< or legal document (e.g., an insurance policy) per se does not appear to be a process, machine, manufacture, or composition of matter. See, e.g., *In re Nuijten*, Docket no. 2006-1371 (Fed. Cir. Sept. 20, 2007) (slip. op. at 18) (“A transitory, propagating signal like Nuijten’s is not a process, machine, manufacture, or composition of matter.” ... Thus, such a signal cannot be patentable subject matter.”).

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Blanset (U.S. Patent 4,744,048).

16. As to claim 1, Blanset discloses a method for preventing an unauthorized display source from overwriting an image displayed by an authorized display source on a video display system wherein the unauthorized display source comprises software code that utilizes a native operating system (col. 1, lines 31-54; col. 4, lines 49-65; MS-DOS

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applications are executed in “real” mode, as opposed to the protected mode used by UNIX; since MS-DOS is accessing the processor directly, and UNIX is not, MS-DOS would be considered the “native” operating system) to generate output for display on the video display system (col. 1, line 57-col. 2, line 20), comprising:

under control of code that is independent of the native operating system, generating a display region mask that defines a display area of the video display system (col. 1, line 57-col. 2, line 20; translation circuitry with associated code sets up a “screen buffer” and an “alternate screen buffer”; the “screen buffer” corresponds to the locations in memory that will actually be output to a screen and therefore corresponds to a “mask” that represents a display region; note that the translation circuitry must be independent of MS-DOS, since MS-DOS is totally unaware whether it is using the display region buffer or non-display region buffer);

associating the generated display region mask with the authorized display source (col. 1, line 57-col. 2, line 20; col. 8, lines 24-55; MS-DOS or UNIX is allowed to write to the display region buffer depending on which is authorized);

and upon receiving an indication from the authorized display source to write the image within the area defined by the associated display region mask, utilizing resources from the native operating system to write the image onto the display area, such that output from an unauthorized source is not displayed within the area defined by the associated display region mask (col. 1, line 57-col. 2, line 20; col. 8, lines 24-55; the translation circuitry receives indication from whichever OS is authorized; if UNIX is authorized, its image is written onto the display buffer transparent to the MS-DOS native

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operating system; output from MS-DOS is not displayed regardless of what order is imposed by MS-DOS; it is further noted that the resources, the screen buffer for instance, controlled by the native operating system are used to write to the display area).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blanset in view of Brown (U.S. Patent 5,673,403).

19. As to claim 2, Blanset discloses a method for preventing a first application from overwriting data displayed by a second application on a video display system, comprising:

generating a display region mask that defines a display area of the video display system (col. 1, line 57-col. 2, line 20; translation circuitry with associated code sets up a "screen buffer" and an "alternate screen buffer"; the "screen buffer" corresponds to the locations in memory that will actually be output to a screen and therefore corresponds to a "mask" that represents a display region);

associating the generated display region mask with the second application (col. 1, line 57-col. 2, line 20; col. 8, lines 24-55; UNIX applications are allowed to write to the

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display region buffer if UNIX is authorized; in this case, a UNIX application would be a “second application” while an MS-DOS application would be a “first application”);

receiving data for the first application from a graphics device interface associated with a native operating system (col. 1, line 57-col. 2, line 20; col. 8, lines 24-55; data is received from the MS-DOS system, inherently through a graphics device interface of some sort);

modifying a portion of the received data intended for the display area defined by the display region mask to prevent the data from the first application from being displayed in the display area defined by the display region mask (col. 1, line 57-col. 2, line 20; col. 8, lines 24-55; col. 9, lines 9-24; the data associated with the MS-DOS application is modified by moving it to an alternate screen buffer that does not actually output values to the display; address values associated with the data are incremented);

and transferring the data, including the modified portion, to a display driver associated with the video display system (col. 8, lines 24-55; all data is transferred to a screen buffer or alternate screen buffer; the screen buffer is then used to drive the display; the modified portion is transferred to the screen buffer when the other operating system is selected).

Blanset does not disclose that the display system displays data from the first application except in the display area defined by the display region mask and simultaneously displays data from the second application in the display area defined by the display region mask. Brown, however, discloses displaying data from a first OS (reading on an “application”) except in a display area defined by a mask, which is used

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to display a second application (col. 2, lines 11-30; the AIX OS allocates display space, reading on a mask, for a non-AIX application; also see figs. 3-4 and col. 4, line 55-col. 5, line 39). The motivation for this simultaneous display is to allow applications from a client OS to run as peers with the applications from the host OS (col. 1, lines 47-60). It would have been obvious to one skilled in the art to modify Blanset to display data from both operating systems simultaneously in order to allow applications from a client OS to run as peers with the applications from the host OS as taught by Brown.

20. As to claim 3, Blanset discloses a method wherein the modification of data is performed by a display filter positioned intermediate the graphics device interface and the video display driver to filter data from the first application intended for the display area defined by the display region mask (col. 9, lines 9-44; the ROM filters data into the correct memory location; its position is intermediate the operating system's display device communication and the buffer that is used to drive the display).

21. As to claim 4, Blanset discloses a method further comprising receiving data for the second application from the graphics device interface and replacing the modified portion of the received data for the first application with the received data for the second application (col. 8, lines 24-55; the data for each application is swapped or "replaced" when authorization switches from one application to another).

22. As to claim 5, Blanset discloses a method further comprising resizing the display area to create a first display area under control of the native operating system and a second display area outside control of the native operating system (col. 1, line 57-col. 2, line 20; col. 8, lines 24-55; by adding the alternate screen buffer, the total area available

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for writing the display contents has been effectively resized into double the area; one of these buffers is under control of the native OS, while the other is not).

23. As to claim 6, Blanset discloses a method wherein the display region mask defines the second display area outside control of the native operating system as the display area of the video display system (col. 1, line 57-col. 2, line 20; col. 8, lines 24-55; the screen buffer that is outside control of MS-DOS, the native operating system, can be selected as the display area, depending on which OS is authorized).

24. As to claim 7, Blanset discloses a method wherein the first application is an executable application of the native operating system (col. 1, line 57-col. 2, line 20; col. 8, lines 24-55; the first application is run by MS-DOS, which is the native operating system).

25. Claims 8-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over NN96057 in view of Blanset and Brown.

26. As to claim 8, NN96057 discloses a system for preventing a first application from overwriting data displayed by a second application on a video display system, comprising:

- a programming interface to provide a routine to associate the generated display region mask with the second application (p. 1, SMAN is an interface that is set up to enable or disable video access for an application);

- a display filter to:

- intercept function calls from a graphics device interface associated with a native operating system (p. 1, SMAN intercepts function calls from OS/2);

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and when the display filter detects that an intercepted function call from the first application is specifying transmission of data to the masked display area, prevent the data from the first application from being displayed in the masked display area (p. 1 , SMAN disables access and sends a return code to the GUI attempting access)

and a display output coupleable to the video display system and configured to receive data from the display filter and to provide the received data to the video display system (an "output" is inherent to the system since the desktop is displayed).

NN96057 does not disclose a system that creates a display region mask that defines a masked display area of the video display system and also clips a portion of the received data intended for the masked display area. Blanset, however, discloses creation of a display region mask defining a masked display area (col. 1, line 57-col. 2, line 20; translation circuitry with associated code sets up a "screen buffer" and an "alternate screen buffer"; the "screen buffer" corresponds to the locations in memory that will actually be output to a screen and therefore corresponds to a "mask" that represents a display region). Data belonging to an unauthorized program is clipped to the alternate screen buffer. The motivation for this is to ensure that an unauthorized program does not write to the display (col. 1, lines 50-54) by "fooling" it into thinking that it has (col. 1, lines 68-col. 2, line 12). It would have been obvious to one skilled in the art to modify NN96057 to create a display region mask and clip data from an unauthorized program in order to ensure that an unauthorized program does not display data as taught by Blanset.

Neither NN86057 nor Blanset discloses a GDI configured to receive GDI calls from a processor executing first and second applications. The references further do not disclose these calls being intercepted. Brown, however, discloses a GPI, an equivalent to a GDI (col. 3, lines 42-55) and further discloses that the GPI calls from applications (and thus, the processor executing said applications) are "captured and redirected" (col. 5, lines 51-67; col. 7, lines 57-65). The motivation for this is to allow support for the OS/2 client application (col. 3, lines 50-55). It would have been obvious to one skilled in the art to modify NN86057 and Blanset to include a GDI and intercept GDI calls in order to allow support for client applications as taught by Brown.

27. As to claim 9, see the rejection to claim 3. Motivation for the combination of NN96057 and Blanset can be found in the rejection to claim 8.

28. As to claim 10, see the rejection to claim 5. Motivation for the combination of NN96057 and Blanset can be found in the rejection to claim 8.

29. As to claim 11, Blanset discloses a system wherein the masked display region mask is positioned within the second display area (col. 1, line 57-col. 2, line 20; col. 8, lines 24-55; the screen buffer that corresponds to the masked display region is outside control of MS-DOS, the native operating system, and therefore corresponds to the "second display area"). Motivation for the combination of NN96057 and Blanset can be found in the rejection to claim 8.

30. As to claim 12, see the rejection to claim 8. Further, NN96057 discloses a system further comprising instructions to cause the computer processor to transfer the data to a display driver associated with the video display system (p. 1 and figure, data is

passed to “VMAN”, the video manager). NN96057 does not disclose a “clipped portion” of data, but Blanset does, as explained in the rejection to claim 8. Motivation for the combination of NN96057 and Blanset can be found in the rejection to claim 8.

Further as to claim 12, neither NN96057 nor Blanset discloses that the display system displays data from the first application except in the display area defined by the display region mask and simultaneously displays data from the second application in the display area defined by the display region mask. Brown, however, discloses displaying data from a first OS (reading on an “application”) except in a display area defined by a mask, which is used to display a second application (col. 2, lines 11-30; the AIX OS allocates display space, reading on a mask, for a non-AIX application; also see figs. 3-4 and col. 4, line 55-col. 5, line 39). The motivation for this simultaneous display is to allow applications from a client OS to run as peers with the applications from the host OS (col. 1, lines 47-60). It would have been obvious to one skilled in the art to modify Blanset to display data from both operating systems simultaneously in order to allow applications from a client OS to run as peers with the applications from the host OS as taught by Brown.

31. As to claim 13, see the rejection to claim 2. Motivation for the combination of NN96057 and Blanset can be found in the rejection to claim 8.

32. As to claim 14, see the rejection to claim 3. Motivation for the combination of NN96057 and Blanset can be found in the rejection to claim 8.

33. As to claim 15, see the rejection to claim 5. Motivation for the combination of NN96057 and Blanset can be found in the rejection to claim 8.

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34. As to claim 16, see the rejection to claim 6. Motivation for the combination of NN96057 and Blanset can be found in the rejection to claim 8.

35. As to claim 17, see the rejection to claim 7. Motivation for the combination of NN96057 and Blanset can be found in the rejection to claim 8.

Conclusion

36. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON M. RICHER whose telephone number is (571)272-7790. The examiner can normally be reached on weekdays from 8:30AM-5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kee M Tung/
Supervisory Patent Examiner, Art Unit 2628

/Aaron M Richer/
Examiner, Art Unit 2628
12/1/08